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Livestock and Meat

OUTLOOK & SITUATION

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Commercial meat production and prices
(All Percent Changes Shown Are From a Year Earlier)

Item	1981				1982			
	I	II	III	IV	I	II ¹	III ¹	IV ¹
<i>Million lbs</i>								
PRODUCTION								
Beef	5,559	5,438	5,541	5,676	5,450	5,375	5,700	5,825
% change	+6	+4	+3	+2	-2	-1	+3	+3
Pork	4,076	3,880	3,606	4,155	3,696	3,550	3,150	3,325
% change	-1	-10	-4	-2	-9	-9	-13	-20
Lamb & mutton	84	77	79	88	90	82	85	92
% change	+5	0	+1	+9	+7	+6	+8	+5
Veal	100	94	105	115	106	100	100	110
% change	+10	+6	+11	+11	+7	+6	-5	-4
Total red meat	9,819	9,489	9,331	10,034	9,342	9,107	9,035	9,352
% change	+3	-2	0	0	-5	-4	-3	-7
Broilers ²	2,849	3,096	3,081	2,880	2,886	3,050	3,100	2,920
% change	+3	+3	+10	+5	+1	-2	+1	+1
Turkeys ²	398	553	785	773	410	540	720	725
% change	+5	+5	+10	+8	+3	-2	-8	-6
Total red meat & poultry	13,066	13,138	13,197	13,687	12,638	12,697	12,865	12,997
% change	+3	-1	+3	+2	-3	-4	-3	-5
PRICES								
Choice steers, Omaha, 900- 1100 lb	61.99	66.68	66.53	60.17	63.36	70.50	66-70	66-70
Barrows & gilts, 7 mkts	41.13	43.63	50.42	42.63	48.17	56.50	55-59	54-58
Slaugh. lambs, Ch., San Ang.	57.33	65.45	59.43	51.38	55.23	65.25	57-61	56-60
<i>cents/lb</i>								
Broilers, 9-city avg. ³	49.3	46.7	47.0	42.1	44.8	45.0	47-51	47-51
Turkeys, NY ⁴	61.3	63.6	62.7	55.1	55.2	59.0	63-67	71-75

¹Forecast. ²Federally inspected slaughter. ³Wholesale weighted average. ⁴Wholesale, 8- to 16-pound young hens.

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Approved by
The World Agricultural
Outlook Board
and Summary released
July 8, 1982

The *Livestock and Meat Situation* will be published in
February, May, July, August, October, and November.

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Summary

Meat Supplies to Continue Down

Total red meat and poultry production during first-half 1982 was 3 percent below year-earlier levels, contributing to higher cattle and hog prices than a year ago. Combined with lower feed costs, the improved prices created the most profitable situation for livestock producers since mid-1979. In the second half of the year, total meat production will continue well below a year ago as further declines in pork production more than offset modest gains in beef and broiler output.

After lagging gains in live animal prices, retail meat prices began to show larger increases this spring. The higher live animal prices will probably continue to be reflected in rising retail prices through at least mid-summer. Reduced production, some boost from the July 1 tax cut, and increased Social Security payments may help support these higher retail prices.

The *Hogs and Pigs* report released in late June indicated sharp cutbacks in pork production. The U.S. inventory of all hogs and pigs on June 1 was estimated 13 percent below a year ago and the lowest June inventory since 1975. The number of market hogs weighing 60 to 179 pounds, normally marketed in the summer quarter, declined 10 percent. Market hogs weighing under 60 pounds, which supply most of the marketings for the fall quarter, dropped 18 percent below a year ago.

Recent profits and prospects for large feed supplies are expected to encourage hog producers to begin expanding their breeding herds this summer and fall. Consequently, pork production is likely to decline 12 to 14 percent this summer and 19 to 21 percent this fall compared with a year ago. Production is not likely to pick up before mid-1983. Pork output during first-half 1982 was 9 percent below a year ago. The 7 market average price for barrows and gilts was \$48.17 and \$56.50 per cwt in the first and second quarters, well above the \$41.13 and \$43.63 recorded a year ago. Second half prices may average \$55 to \$58.

First-half beef production was about 2 percent below a year ago as average slaughter weights declined approximately 20 pounds and more than offset the 1-percent increase in slaughter. Profits in the first half of the year have encouraged increased feedlot placements. Through May, net placements in the 7 major cattle feeding states rose 15 percent over a year ago, and are expected to boost beef production 3 percent in the second half of 1982. Choice fed steer prices at Omaha averaged \$63.36 per cwt in the first quarter and \$70.50 in the second. Second-half prices may average \$66 to \$70 if cattle feeders keep feedlot inventories current and slaughter weights down, which they are likely to do as profits continue in 1982.

Livestock and Meat Situation

FACTORS AFFECTING THE LIVESTOCK INDUSTRY

The recession that began last July appears to have bottomed out this spring. However, only a relatively mild recovery is expected in the second half of the year as interest rates and unemployment are likely to remain high. The second phase of the individual income tax reductions, a 10 percent reduction, went into effect on July 1. This cut, plus the July 1 increase in Social Security payments, will add \$40 billion on an annual basis to consumer incomes. The increased purchasing power should help support retail prices in the meat sector as live-animal price increases are passed on to consumers.

A wet, cool spring set the stage for good grazing and forage prospects. Hay stocks on May 1 were 1 and 25 percent below 1981 and 1980 stocks, respectively. The stocks, which were pulled down during the severe winter, should be rebuilt this summer. Range and pasture conditions on July 1 were good to excellent, averaging 90 percent, 6 percentage points above a year ago and 9 percentage points above the 10-year average.

Although the wet, cool weather delayed planting and crop progress this spring, particularly in the western Cornbelt, most crops were advancing favorably in early July. This year's feed grain and soybean crops are expected to produce another large harvest. Stocks of the four feed grains on June 1 were 40 percent greater than a year earlier. Corn stocks were a record high 3.8 billion bushels, a 39-percent gain over 1981. The proportion of corn stocks stored on farms increased from 66 percent in 1981 to 70 percent this year reflecting the large movement of corn into the farmer-owned reserve in late winter this year, a 900-million bushel increase. Corn prices at the farm are expected to average \$2.50 to \$2.90 in 1982/83 compared with \$2.50 this year. Soybean meal prices at Decatur are expected to average \$185 per ton this year and may average \$175 to \$210 per ton in the 1982/83 crop year.

First-half 1982 broiler production was even with year-earlier levels. Second half production may rise 1 percent. Expansion likely will be limited this year because of a smaller hatchery supply flock. However, a 14-percent rise in pullet replacements in May suggests expansion in 1983.

Broiler prices in the 9 cities averaged about 45 cents a pound in the first half, compared with 48 cents average a year ago. Prices may move above year-earlier averages in the second half, ranging from 47 to 51 cents.

HOGS

The June *Hogs and Pigs* report indicates that producers continue to cut back the breeding herd as they have since early 1980, despite greatly improved returns during the first half of the year. Producers have been reducing the breeding herd since early 1980. The continued cut-back reflects the financial losses sustained by producers from mid-1979 through 1981. In addition, it may partial-

ly reflect pork producers' need to sell hogs to reduce indebtedness or obtain money for current operating expenses without borrowing at relatively high interest rates. The improved returns reflect substantially higher hog prices and lower production costs—especially feed costs which were sharply lower than last year. The prices of the two principal feed components—corn and hog protein supplement—were 22 and 8 percent lower than a year earlier.

Commercial pork production in the second quarter is estimated at 3,550 million pounds, down 9 percent from a year ago. The drop in pork production, along with relatively unchanged supplies of competing meats resulted in continuing higher live-animal prices. Barrow and gilt prices rose through late May and remained in the high fifties on a weekly basis through the remainder of the quarter. Barrow and gilt prices at the 7 markets averaged \$56.50 per cwt this spring, up 29 percent from a year earlier.

June Market Hog Inventory Down 13 Percent; Breeding Herd Falls 12 Percent

The U.S. inventory of all hogs and pigs was estimated at 52.0 million head on June 1, down 13 percent from a year earlier and the lowest June inventory since 1975. Meanwhile, the breeding herd dropped 12 percent from a year ago and was 22 percent below 1980. The market hog inventory dropped 13 percent from last year and 20 percent from 2 years earlier.

The December 1981-May 1982 pig crop was down 14 percent from last year, and 13 percent fewer sows farrowed. Despite the cold winter, the 7.34 pigs saved per litter were down only 1 percent from last year's record high.

The weight distribution of the market hog inventory suggests that the year-to-year decline in slaughter numbers may increase as the year progresses. The inventory of market hogs weighing 60-179 pounds was down 10 percent. Most of these hogs will be marketed in the summer quarter, when hog slaughter is forecast to be down 13 to 15 percent from last year. Commercial pork production is forecast to be down only 12 to 14 percent as the average dressed weight is expected to increase from last year's relatively light 169 pounds. Last summer, hogs moved to market earlier and at lighter weights than normal. In addition, producers may begin to hold back gilts for the breeding herd, especially if corn crop prospects remain good. Also, sow slaughter is expected to drop sharply because of the already sharp reduction in the breeding herd and the likelihood of herd rebuilding this summer. Factors affecting producers' decisions about expansion are: corn crop prospects, the size of feeding margins and producers' financial conditions.

Fourth-quarter slaughter will be drawn largely from the inventory of hogs weighing under 60 pounds on June 1. This weight category was down 18 percent from a year earlier. Last year, part of the hogs that normally would have been marketed in early 1982 were marketed in fourth quarter 1981. The summer and fall of 1981 were relatively free of extreme weather conditions, which resulted in faster rates of gain and hogs being marketed

in a shorter period of time. In addition, producers were reducing the breeding herd last fall. This fall, in contrast, producers may be rebuilding the breeding herd, further reducing available hogs for market. Commercial slaughter this fall is forecast to be 19 to 21 percent below last year.

Hog Prices To Average Sharply Higher Than a Year Ago

Sharply lower commercial pork production and lower stocks of frozen pork at the beginning of the second quarter have strengthened hog prices. In addition, supplies of competing meats were below levels of last year and may rise only modestly over a year earlier in the second half of the year. Pork production will remain below last year's level in the second half and, expected increases in consumer incomes should help support hog prices. Pork production will increase seasonally in the fourth quarter when prices could weaken a little. Barrow and gilt prices are expected to average \$55 to \$59 per cwt in the third quarter and \$54 to \$58 in the fourth.

If corn prices are weakened than expected this summer, producers may build up their breeding herds faster than expected from the June 1 farrowing intentions, cutting near-term pork production more than currently projected. This could cause hog prices to rise into the low \$60's and average above the expected \$55 to \$59 per cwt for the third quarter. However, a sharp increase in the breeding herd this summer and fall would dampen hog prices, especially in the second half of 1983.

Historical 14-State Hogs and Pigs Quarterly Series Changed to 10 States

Effective with the *Hogs and Pigs* report released on June 22, the Crop Reporting Board cut its quarterly estimates of inventory, the pig crop, and breeding intentions from 14 States to 10. Estimates for the 10 Quarterly States account for about 79 percent of U.S. total inventory. The 10 quarterly reporting States are Georgia, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Carolina, and Ohio. Data for these 10 States back to 1973 are shown in the 10-State inventory table. Data for the individual 50 States will be available only in the December *Hogs and Pigs* report.

Pork Exports Weaker

Stronger domestic prices, weaker world economic conditions, and continued dollar strength have resulted in lower pork exports. During the first 5 months of 1982, pork exports totaled 114.4 million pounds (carcass weight) down 28 percent from a year earlier. Continuing higher pork prices will probably limit the anticipated recovery in pork exports during the coming months. Pork exports and shipments for 1982 are projected at 425 million pounds, down 6 percent from 1981.

Pork Production Decline To Continue into 1983

The June U.S. breeding inventory and farrowing intentions suggest that commercial production may continue to fall in the first half of 1983, resulting in higher hog and retail pork prices. In the June survey, producers indicated they intended to have 10 percent fewer sows farrow during June-November than in 1981. The result-

Federally Inspected hog slaughter

Week ended		1980	1981	1982
Thousands				
Jan.	2 ¹	1,377	1,297	1,428
	9	1,971	1,957	1,881
	16	1,762	1,885	1,656
	23	1,785	1,792	1,643
	30	1,777	1,816	1,623
Feb.	6	1,769	1,773	1,552
	13	1,760	1,731	1,650
	20	1,642	1,672	1,484
	27	1,776	1,698	1,652
Mar.	6	1,806	1,757	1,698
	13	1,898	1,832	1,676
	20	1,885	1,826	1,663
	27	1,858	1,840	1,705
Apr.	3	1,736	1,848	1,609
	10	1,919	1,914	1,606
	17	2,024	1,823	1,608
	24	2,028	1,727	1,656
May.	1	1,918	1,771	1,640
	8	1,972	1,763	1,596
	15	1,916	1,771	1,610
	22	1,891	1,694	1,553
	29	1,582	1,422	1,532
June	5	1,850	1,560	
	12	1,747	1,617	
	19	1,683	1,500	
	26	1,669	1,434	
July	3	1,268	1,324	
	10	1,573	1,401	
	17	1,600	1,444	
	24	1,530	1,442	
	31	1,573	1,496	
Aug.	7	1,553	1,539	
	14	1,611	1,554	
	21	1,612	1,576	
	28	1,656	1,590	
Sept.	4	1,497	1,658	
	11	1,867	1,456	
	18	1,812	1,785	
	25	1,707	1,699	
Oct.	2	1,759	1,742	
	9	1,791	1,769	
	16	1,864	1,817	
	23	1,861	1,786	
	30	1,890	1,788	
Nov.	6	1,955	1,814	
	13	1,810	1,789	
	20	2,022	1,841	
	27	1,514	1,511	
Dec.	4	1,952	1,947	
	11	1,841	1,884	
	18	1,816	1,864	
	25	1,815	1,223	

¹Corresponding dates: January 5, 1980, January 3, 1981.

ing pig crop is projected to be 11 percent smaller, because pigs saved per litter may also be down 2 percent. The projected number of pigs saved is the average over the past 10 years with an allowance for trend.

In the 10 quarterly reporting States, producers indicated that farrowings would be 9 percent lower during June-August and September-November. Actual farrowings may differ significantly from intentions due to

**Hogs and pigs: Inventory number, March 1, June 1, September 1, December 1,
1973-82, 10 States¹**

Item	1973	1974	1975	1976	1977	1978
<i>1,000 Head</i>						
Inventory number March 1						
All hogs and pigs	42,195	43,063	36,080	36,675	39,550	40,200
Kept for breeding	6,679	6,691	5,370	5,946	6,216	6,186
Market	35,516	36,372	30,710	30,729	33,334	34,014
Market hogs and pigs by weight groups:						
Under 60 pounds	13,268	13,010	10,809	12,103	12,664	13,057
60-119 pounds	8,161	8,526	7,351	7,002	7,728	8,094
120-179 pounds	8,362	8,619	7,288	6,690	7,674	7,582
180 pounds and over	5,725	6,217	5,262	4,934	5,268	5,281
Inventory number June 1						
All hogs and pigs	45,662	45,111	36,510	41,355	41,560	42,155
Kept for breeding	6,729	6,569	5,487	6,257	6,507	6,578
Market	38,933	38,542	31,023	35,098	35,053	35,577
Market hogs and pigs by weight groups:						
Under 60 pounds	18,599	17,970	13,871	16,647	16,467	15,898
60-119 pounds	9,326	9,402	7,696	8,646	8,311	8,666
120-179 pounds	6,302	5,989	5,297	5,659	5,999	6,324
180 pounds and over	4,706	5,181	4,159	4,146	4,276	4,689
Inventory number September 1						
All hogs and pigs	46,133	44,525	37,100	43,560	43,880	44,110
Kept for breeding	6,634	5,977	5,330	6,033	6,369	6,616
Market	39,499	38,548	31,770	37,527	37,511	37,494
Market hogs and pigs by weight groups:						
Under 60 pounds	15,700	14,594	12,748	15,065	15,435	15,608
60-119 pounds	10,326	10,366	8,020	9,483	8,485	9,397
120-179 pounds	8,210	8,080	6,491	7,698	7,316	7,199
180 pounds and over	5,263	5,508	4,511	5,281	5,275	5,290
Inventory number December 1						
All hogs and pigs	46,745	42,030	37,525	42,440	43,320	46,060
Kept for breeding	6,528	5,526	5,628	6,067	6,524	7,190
Market	40,217	36,504	31,897	36,373	36,796	38,870
Market hogs and pigs by weight groups:						
Under 60 pounds	15,546	13,545	12,203	14,417	14,833	16,085
60-119 pounds	10,622	9,759	8,581	9,597	9,561	10,107
120-179 pounds	7,972	7,578	6,360	6,976	7,084	7,330
180 pounds and over	6,077	5,622	4,753	5,383	5,318	5,348
Sows farrowing:						
December ² -February	1,998	1,990	1,577	1,821	2,057	2,035
March-May	2,919	2,829	2,146	2,570	2,558	2,530
December ² -May	4,917	4,819	3,723	4,391	4,615	4,565
June-August	2,214	2,120	1,854	2,219	2,288	2,342
September-November	2,238	2,005	1,859	2,250	2,277	2,477
June-November	4,452	4,125	3,713	4,469	4,565	4,819
Pig crop:						
December ² -February	14,168	13,821	11,188	13,042	13,946	13,937
March-May	20,953	20,210	15,436	19,034	18,897	18,242
December ² -May	35,121	34,031	26,624	32,076	32,843	32,179
June-August	15,789	14,993	13,331	16,214	16,452	16,854
September-November	15,912	14,251	13,384	15,973	16,321	17,723
June-November	31,701	29,244	26,715	32,187	32,773	34,577
<i>Number</i>						
Pigs per litter:						
December ² -February	7.09	6.95	7.09	7.16	6.78	6.85
March-May	7.18	7.14	7.19	7.41	7.39	7.21
December ² -May	7.14	7.06	7.15	7.30	7.12	7.05
June-August	7.13	7.07	7.19	7.31	7.19	7.20
September-November	7.11	7.11	7.20	7.10	7.17	7.16
June-November	7.12	7.09	7.19	7.20	7.18	7.18

See footnotes at end of table.

Continued—

**Hogs and pigs: Inventory number, March 1, June 1, September 1, December 1,
1973-82, 10 States¹—Continued**

Item	1979	1980	1981	1982	1982 as % of	
					1980	1981

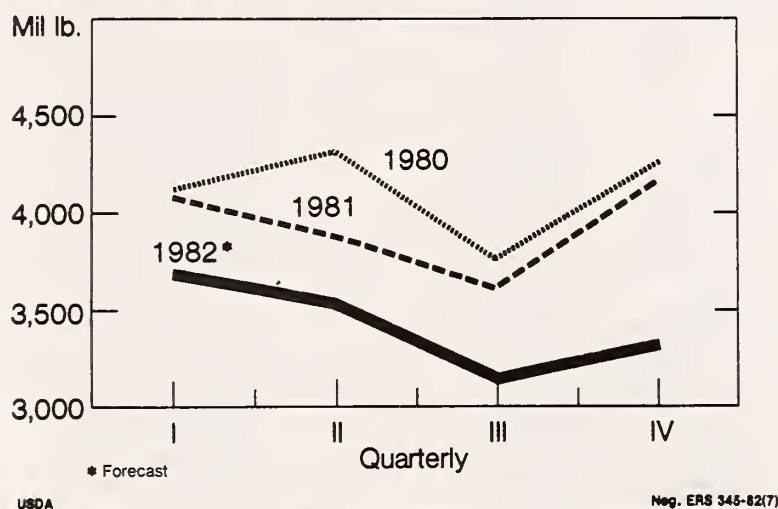
¹Georgia, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Carolina, Ohio. ²December preceding year. ³Intentions.

Hogs on farms June 1, farrowings and pig crops, United States

Item	1980	1981	1982	1982/81
	1,000 head		% change	
Inventory	65,255	59,740	51,990	-13
Breeding	9,481	8,358	7,389	-12
Market	55,774	51,382	44,601	-13
60 lb	25,002	23,069	18,941	-18
60-119 lb	13,550	12,204	10,954	-10
120-179 lb	9,781	9,041	8,200	-9
180 + lb	7,441	7,068	6,506	-8
Sows farrowing				
December-May	7,229	6,440	5,578	-13
June-November	6,829	6,258	5,637	-10
Pig crop				
December-May	52,286	47,600	40,956	-14
June-November	49,256	46,176	40,900	-11
Pigs per litter				
December-May	7.23	7.39	7.34	-1
June-November	7.21	7.38	7.26	-2

¹Intentions. ²Average number of pigs per litter with allowance for trend.

Pork Production



changing economic and weather conditions. Producers are surveyed for their farrowing intentions for 1 and 2 quarters in advance. For intentions indicated a second time these differences have exceeded 4 percent for about one-third of the quarterly sow farrowings during the last 8 years. For first intentions these differences have exceeded 7 percent for about one-third of the past 8 years. Even so, it appears that pork production will decline through the first half of 1983.

Retail Prices Higher; Rise to Continue

During the first 5 months of 1982, retail pork prices averaged 10 percent higher than a year ago. Farm-to-retail price spreads declined from 85.6 cents per pound in January to 77.6 cents in May as the net farm value rose from 72.6 cents to 92.0 cents. So, the gain is attributable to rising live-animal prices.

Although live-animal prices are not expected to rise on a sustainable basis above current levels, retail prices are expected to climb in the second half of the year and average about \$1.75 per pound, 11 percent above a year ago.

In second half of the year, price spreads are expected to widen as live-animal prices remain steady and decline

Hog-corn price ratio, Omaha basis

Month	1979	1980	1981	1982
January	24.0	16.5	13.0	18.4
February	25.5	16.1	13.3	20.1
March	22.6	15.2	12.4	19.8
April	19.9	12.3	12.3	19.8
May	18.1	12.0	12.9	21.8
June	16.4	13.8	15.2	
July	14.2	15.3	15.9	
August	15.4	16.1	18.1	
September	16.2	15.6	19.8	
October	14.6	15.2	18.7	
November	15.3	13.8	17.5	
December	16.0	13.5	16.8	
Average	18.2	14.6	15.5	

Hog prices, costs, and net margins¹

Year	Barrows & gilts, 7 markets	Feed and feeder	Break-even	Net margins
\$ per cwt				
1981				
January	41.42	39.74	49.76	-8.34
February	42.43	42.07	52.31	-9.88
March	39.54	42.90	53.15	-13.61
April	39.79	43.57	53.90	-14.11
May	42.05	40.11	50.40	-8.35
June	49.04	42.30	53.45	-4.41
July	50.66	41.60	52.75	-2.09
August	50.92	43.78	55.05	-4.13
September	49.68	42.15	53.17	-3.49
October	45.62	42.61	53.73	-8.11
November	42.20	40.27	51.22	-9.02
December	40.06	41.44	52.66	-12.60
1982				
January	45.63	39.95	51.25	-5.62
February	49.49	36.64	47.70	+1.79
March	49.38	35.21	46.16	+3.22
April	52.08	34.30	45.10	+6.98
May	58.14	35.98	46.93	+11.21
June		39.27	50.60	
July		44.81	56.69	
August		47.07	59.15	
September		48.29	60.47	

¹Selling price required to cover costs of feeding 40- to 50-lb feeder pig to 220-lb slaughter hog in Corn Belt.

seasonally in the fourth quarter. The expected increase will reflect higher marketing costs and lower slaughter volume. The farm-to-retail spread for the year may average about the same as last year. So, there will be cost pressure to widen the spread in 1983.

Cash Receipts Record High

Cash receipts from the sale of hogs and pigs in 1981 were a record high \$9.8 billion, up 10 percent from 1980, and 9 percent higher than the previous record in 1979. Sharply higher hog prices this year may bring about a new record despite the expected large decline in marketings. Cash receipts could be 6 to 8 percent higher this year than in 1981. Cash receipts in the first half of the year are estimated about 15 percent higher than a year earlier because sharply higher hog prices more than offset the decline in marketings. In the second half of the year, a similar situation will occur. However, cash receipts are expected to be only 3 to 5 percent higher than a year earlier.

Hog Feeding Margins Positive For Past 5 Months

The substantial rise in hog prices during the first half of the year combined with lower costs, resulted in positive finishing margins in the last 5 months for Corn Belt feeder pig finishers. The only other previous period of positive feeding margins, since mid-1979 was during July-November 1980. The feeding margin rose from \$1.79 in February 1982 to \$12.11 in May, then declined slightly in June. Hog prices averaged 24 percent higher in the first half of 1982 than a year ago. The breakeven point declined 9 percent largely due to lower feed costs.

Feeding margins are expected to remain positive through July, then may go negative in August and September as the high-priced feeder pigs of April and May are marketed. The average price for a southern Missouri 40-50 pound feeder pig rose from \$31.70 per head in January to \$57.84 in May. In June, the average price declined to about \$50. Feeder pig prices may average in the high forties through fall.

CATTLE

Despite larger cattle slaughter than a year ago during first-half 1982, reduced slaughter weights held beef production below year-earlier levels. Reduced beef production combined with sharply reduced supplies of competing meats, caused fed cattle prices to average over \$70 this spring. Larger beef supplies in the second half of the year will likely result in moderately lower prices.

Slaughter Weights Drop

Commercial cattle slaughter during first-half 1982 was 1 percent above a year earlier. However, beef production was about 2 percent lower because slaughter weights averaged nearly 20 pounds below the heavy weights of a year ago. The average dressed weight of federally inspected carcasses declined from about 640 pounds in early January to about 620 pounds in June. Slaughter weights at last year's heavy averages would have added more than 300 million pounds to production in the first half of this year, resulting in a 1-percent increase in production rather than a 2-percent decline. A change of this sort would have caused higher feeding costs and undoubtedly lower cattle prices.

Second quarter Choice steer prices at Omaha averaged \$70.50 per cwt due to current feedlot inventories coupled with reduced meat production. This average was well above the \$63.36 and \$66.68 recorded during the first quarter of this year and the spring of 1981, respectively. In mid-May and again in early June, Choice fed steer prices averaged slightly above \$73, the highest weekly average for the year. Prices declined to the upper \$60's during June as prospects for larger beef supplies throughout the second half of the year were confirmed and concern over the economic recovery continued.

Prices for Choice 600 to 700 pound yearling feeder steers rose along with fed cattle prices during the first half, but the rise was smaller. Yearling feeder steers at Kansas City averaged slightly over \$63 per cwt in the first quarter, about the same as Choice fed steers. However, in the second quarter, fed steers averaged over \$70, and yearlings brought slightly less than \$67. The price differential was even more dramatic in the High Plains commercial cattle feeding area, where Choice fed steers averaged near \$75 in late May and early June, and year-

Steer prices, costs, and net margins¹

Year and month	Steers, Omaha	Feed & feeder	Break-even	Net margin
\$ per cwt				
1981				
January	63.08	61.01	70.51	-7.43
February	61.50	64.07	73.87	-12.37
March	61.40	65.42	75.31	-13.91
April	64.92	64.32	74.21	-9.29
May	66.86	63.79	73.62	-6.76
June	68.26	64.16	74.00	-5.74
July	67.86	63.74	74.25	-6.39
August	66.37	62.60	73.32	-6.95
September	65.37	61.63	72.28	-6.91
October	61.45	62.10	72.63	-11.18
November	59.81	59.91	70.10	-10.29
December	59.24	59.15	69.32	-10.08
1982				
January	60.75	58.10	68.48	-7.73
February	63.54	58.10	68.53	-4.99
March	65.80	56.42	66.88	-1.08
April	69.11	54.60	65.09	+4.02
May	72.10	54.48	64.97	+7.13
June		52.50	62.72	
July		53.01	63.06	
August		54.61	64.84	
September		56.27	66.65	
October		57.00	67.46	
November		58.11	68.69	

¹Selling price required to cover costs of feeding 600-lb steer to 1,050-lb slaughter

ling feeder steers averaged below \$65. Large losses since mid-1979, and above 18-percent interest rates in the specialized commercial feeding areas caused cattle feeders to bid cautiously for replacement feedlot cattle despite profits this spring.

Utility cow prices at Omaha have also risen since the first of the year. Cow prices averaged \$38 in the first quarter and over \$42 this spring. Despite increased cattle prices, cow slaughter has remained above first-half 1981 levels. Slaughter rates have been above a year ago primarily in the Southeast, the Corn Belt-Lake States, and West Coast States. Poor financial conditions, high interest rates, and a need to generate internal capital to reduce debt load and fund current operating expenses, especially spring planting, may have forced increased culling this spring.

Placements Through May Rose 15 Percent

The first sustained feedlot profits since mid 1979 plus lower feed and moderating feeder cattle prices continue to encourage increased feedlot placements. Net placements (placements less other disappearance) in the 7 major cattle feeding States during the first quarter rose 23 percent above a year ago. April placements remained large, although below the record levels of a year ago. May placements increased 20 percent over a year earlier.

Feedlot marketings remained above a year earlier in April and May, keeping feedlot inventories current. Although the larger first-half placements portend increased marketings in the second half, the sharpest increases in placements have occurred in the commercial feeding areas where slaughter weights are likely to be held down. Placements in Iowa, the only State surveyed monthly that has a large farmer-feeding industry that

Great Plains custom cattle feeding

Purchased during Marketed during	Selected costs at current rates ¹											
	June Dec.	July Jan.82	Aug. Feb.	Sept. Mar.	Oct. Apr.	Nov. May	Dec. June	Jan. 82 July	Feb. Aug.	Mar. Sept.	Apr. Oct.	May Nov.
<i>Dollars per head</i>												
Expenses:												
600 lb feeder steer	379.20	369.72	384.96	390.66	375.00	385.02	363.00	364.68	382.68	388.44	384.42	387.00
Transportation to feedlot (300 miles)	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Commission	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Feed:												
Milo (1,500 lb)	82.95	82.20	70.95	64.05	67.35	67.95	67.80	68.70	68.55	67.65	69.75	76.05
Corn (1,500 lb)	94.80	94.80	82.50	76.95	76.95	75.45	73.50	77.70	77.55	77.70	80.25	87.00
Cottonseed meal (400 lb)	56.00	56.00	54.00	54.00	50.00	48.00	48.00	48.00	50.00	52.00	48.00	48.00
Alfalfa hay (800 lb)	51.00	46.40	46.00	46.00	48.00	46.40	47.20	47.20	48.00	46.80	46.40	44.80
Total feed cost	284.75	279.40	253.45	241.00	242.30	237.80	236.50	241.60	244.10	244.15	244.40	255.85
Feed handling & management charge	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Vet medicine	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Interest on feeder & 1/2 feed	54.77	56.67	57.68	57.51	49.62	45.98	42.71	43.09	46.69	48.14	46.86	47.63
Death loss (1.5 per- cent of purchase)	5.69	5.54	5.77	5.86	5.62	5.78	5.46	5.47	5.74	5.83	5.77	5.81
Marketing ²	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.
Total	755.37	742.29	732.82	725.99	703.50	705.54	678.63	685.80	710.17	717.52	712.41	727.25
<i>Dollars per cwt</i>												
Selling price required to cover ³												
Feed and feeder cost (1,056 lb)	62.87	61.47	60.46	59.82	58.46	58.98	56.77	57.41	59.35	59.90	59.55	60.88
All costs	71.53	70.29	69.40	68.75	66.62	66.68	64.26	64.94	67.25	67.95	67.46	68.87
Selling price \$/cwt ⁴	61.14	62.34	64.81	67.00	71.64	74.43						
Net margin/cwt	-10.39	-7.95	-4.59	-1.75	+5.02	+7.75						
Cost per 100 lb gain:												
Variable costs less interest	62.89	61.79	56.64	54.17	54.38	53.52	53.19	54.21	54.77	54.80	54.83	57.13
Feed costs	56.95	55.88	50.69	48.00	48.46	47.56	47.30	48.32	48.82	48.83	48.88	51.17
Unit Prices:												
Choice feeder steer 600-700 lb												
Amarillo \$/cwt	63.20	61.62	64.16	65.11	62.50	64.17	60.50	60.78	63.78	64.74	64.07	64.50
Transportation rate \$/cwt/100 miles ⁵	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Commission fee \$/cwt	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
Milo \$/cwt ⁶	5.53	5.48	4.73	4.27	4.49	4.53	4.52	4.58	4.57	4.51	4.65	5.07
Corn \$/cwt ⁶	6.32	6.32	5.50	5.13	5.13	5.03	4.90	5.18	5.17	5.18	5.35	5.80
Cottonseed meal \$/cwt ⁷	14.00	14.00	13.50	13.50	12.50	12.00	12.00	12.00	12.50	13.00	12.00	12.00
Alfalfa hay \$/ton ⁸	127.50	116.00	115.00	115.00	120.00	116.00	118.00	118.00	120.00	117.00	116.00	112.00
Feed handling & management charge \$/ton	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Interest, annual rate	21.00	21.75	22.50	22.50	20.00	18.25	17.75	17.75	18.50	18.50	18.50	18.50

¹Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individual feedlots. For individual use, adjust expenses and prices for management, production level, and locality of operation. Steers are assumed to gain 500 lbs in 180 days at 2.8 lbs per day with feed conversion of 8.4 lbs per pound gain. ²Most cattle sold f.o.b. at the feedlot with 4 percent shrink. ³Sale weight 1,056 lbs (1,100 lbs less 4 percent shrink). ⁴Choice slaughter steers, 900-1100 lbs, Texas-New Mexico direct. ⁵Converted from cents per mile for a 44,000-lb haul. ⁶Texas Panhandle elevator price plus \$.15/cwt handling and transportation to feedlots. ⁷Average prices paid by farmers in Texas. ⁸Average price received by farmers in Texas plus \$30/ton handling and transportation to feedlots.

7 States cattle on feed, placements, and marketings

Year	On feed	Change previous year	Net placements	Change previous year	Marketings	Change previous year
	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent
1981						
Jan.	7,863	-7.0	1,167	-0.7	1,525	-8.8
Feb.	7,505	-5.7	1,061	+0.5	1,440	-8.9
Mar.	7,126	-4.3	1,264	+6.0	1,538	+3.9
Apr.	6,837	-4.5	1,579	+42.6	1,386	-3.4
May	7,030	+3.0	1,424	+1.1	1,400	+1.2
June	7,054	+2.9	1,241	-6.8	1,439	+3.4
July	6,846	+0.8	1,017	-28.6	1,412	+4.9
Aug.	6,451	-6.3	1,364	-12.4	1,526	+9.1
Sept.	6,289	-10.7	1,759	+5.8	1,432	-0.3
Oct.	6,596	-9.0	1,962	-7.3	1,445	-8.3
Nov.	7,113	-8.7	1,510	-1.0	1,295	-4.3
Dec.	7,328	-8.0	1,203	6.6	1,330	-4.2
1982						
Jan.	7,201	-8.4	1,376	+17.9	1,522	-0.2
Feb.	7,055	-6.0	1,227	+15.6	1,413	-1.9
Mar.	6,869	-3.6	1,697	+34.3	1,542	-0.7
Apr.	7,024	+2.7	1,456	-7.8	1,414	+2.0
May	7,066	+0.5	1,710	+20.1	1,413	+0.9
June	7,363	+4.4				

tends to feed to heavier weights, were up only 2 percent during April-May. Although the number of cattle on feed in the 7 States on June 1 was 4 percent over last year, the number on feed declined 7 percent in Iowa. Cattle on feed were down 8 percent in Arizona, the only other State showing a decline. If feedlots inventories remain current, as they tend to in profitable situations, the larger second half marketings should not be burdensome given the lower total meat supplies expected.

Second-Half Prices To Decline Modestly

Larger fed cattle marketings and seasonal increases in nonfed slaughter may cause second-half beef production to rise 6 to 8 percent over first half levels, but only 3 percent above second-half 1981. The larger supplies are likely to result in moderate price declines, with second-half Choice steer prices at Omaha averaging \$66 to \$70 per cwt. Despite the larger beef supplies, second-half prices will be supported by the July 1 tax cut and increased Social Security payments. However, further evidence of at least a moderate, sustainable, economic recovery and continued current feedlot marketings at light weights will be necessary to approach the upper end of this range. Fed cattle prices are expected to remain above breakeven levels. Consequently, feedlot operators are likely to keep their marketings current.

Available feeder cattle supplies are likely to tighten this summer due to the large number already placed on feed and excellent grazing conditions throughout most of the stocker cattle regions. Even though feeder cattle supplies are tightening, feedlot inventories have increased and feedlot operators are likely to continue to be cautious bidders, limiting price gains for feeder cattle. Feeder cattle supplies will increase seasonally in late summer and fall, and another large grain crop would encourage larger placements. Consequently, yearling feeder steer prices at Kansas City will likely average in the mid \$60's for the rest of the year.

Retail Beef Prices Continue To Rise

In May, retail beef prices finally broke out of the narrow \$2.35 to \$2.43 per pound range they had been in since mid-1980 when total meat supplies rose to record levels. Beef prices averaged \$2.37 per pound in the first quarter, but moved up to \$2.40 in April and \$2.46 in May. However, retail beef price advances through May still lagged the increases in fed cattle prices. These higher prices will continue to be passed on to consumers through summer. Modest declines in second-half fed cattle prices from spring quarter highs will likely help moderate retail beef price increases this fall.

**Pork: Retail, wholesale, and farm values, spreads, and farmers' share,
1977 to present¹**

Year	Retail price ²	Wholesale value ³	Gross farm value ⁴	Byproduct allowance ⁵	Net farm value ⁶	Farm-retail spread		Farm whole-sale	Farmers' share ⁷
						Total	Wholesale retail		
					<i>Cents/lb.</i>				<i>Percent</i>
1977	125.4	99.0	70.2	4.6	65.6	59.8	26.4	33.4	52
1978	143.6	107.7	82.5	5.9	76.6	67.0	35.9	31.1	53
1979	144.1	100.4	72.2	5.6	66.6	77.5	43.7	33.8	46
1980	139.4	98.0	68.3	5.1	63.2	76.2	41.4	34.8	45
1981	152.4	106.7	75.5	5.2	70.3	82.1	45.7	36.4	46
1978									
I	137.0	104.8	80.7	5.6	75.1	61.9	32.2	29.7	55
II	142.4	105.6	81.3	5.8	75.5	66.9	36.8	30.1	53
III	144.7	107.6	82.4	6.0	76.4	68.3	37.1	31.2	53
IV	150.1	112.7	85.3	6.1	79.2	70.9	37.4	33.5	53
1979									
I	156.1	113.8	88.2	6.9	81.3	74.8	42.3	32.5	52
II	148.2	100.1	73.1	5.7	67.4	80.8	48.1	32.7	45
III	138.0	93.4	65.6	5.1	60.5	77.5	44.6	32.9	44
IV	134.3	94.1	62.0	4.7	57.3	77.0	40.2	36.8	43
1980									
I	133.9	90.9	61.8	4.6	57.2	76.7	43.0	33.7	43
II	125.3	82.3	53.1	3.8	49.3	76.0	43.0	33.0	39
III	144.2	107.7	78.6	5.7	72.9	71.3	36.5	34.8	51
IV	154.3	111.2	79.1	5.8	73.3	81.0	43.1	37.9	48
1981									
I	148.7	103.4	70.0	4.8	65.2	83.5	45.3	38.2	44
II ⁸	144.7	104.1	73.9	5.0	68.9	75.8	40.6	35.2	48
III	157.5	113.6	85.8	5.9	79.9	77.6	43.9	33.7	51
IV	158.7	105.6	72.4	5.0	67.4	91.3	53.1	38.2	42
1982									
I	160.1	108.7	82.0	5.6	76.4	83.7	51.4	32.4	48
1981 ⁸									
Jan.	151.5	104.1	70.6	5.0	65.6	85.9	47.4	38.5	43
Feb.	148.4	104.6	72.1	4.8	67.3	81.1	43.8	37.3	45
Mar.	146.2	101.6	67.2	4.6	62.6	83.6	44.6	39.0	43
Apr.	142.7	101.2	67.4	4.6	62.8	79.9	41.5	38.4	44
May	144.9	101.5	71.1	4.8	66.3	78.6	43.4	35.2	46
June	146.6	109.5	83.1	5.6	77.5	69.1	37.1	32.0	53
July	154.9	114.5	86.8	5.9	80.9	74.0	40.4	33.6	52
Aug.	158.1	113.6	86.3	5.9	80.4	77.7	44.5	33.2	51
Sept.	159.5	112.7	84.3	6.0	78.3	81.2	46.8	34.4	49
Oct.	160.4	107.9	77.3	5.5	71.8	88.6	52.5	36.1	45
Nov.	158.2	105.3	71.8	5.0	66.8	91.4	52.9	38.5	42
Dec.	157.4	103.5	68.0	4.5	63.5	93.9	53.9	40.0	40
1982									
Jan.	158.2	107.0	77.8	5.2	72.6	85.6	51.2	34.4	46
Feb.	160.7	108.8	84.2	5.9	78.3	82.4	51.9	30.5	49
Mar.	161.4	110.4	84.0	5.8	78.2	83.2	51.0	32.2	48
Apr.	163.0	114.0	88.8	6.1	82.7	80.3	49.0	31.3	51
May	169.6	122.1	98.8	6.8	92.0	77.6	47.5	30.1	54

¹Revised series. ²Estimated weighted-average price of retail cuts from pork carcass. ³Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.06 is used for all years. ⁴Market values to producer for quantity of live-animal equivalent to 1 lb of retail cuts. The farm-product equivalent of 2.12 was used prior to 1959; it was decreased gradually to 1.70 in 1977 and later. ⁵Portion of gross farm value attributable to edible and inedible byproducts. ⁶Gross farm value minus byproduct allowance. ⁷Percent net farm value is of retail price. ⁸ERS data through May 1981, BLS series since June.

**Beef, Choice Yield Grade 3: Retail, carcass, and farm values, spreads,
and farmers' share, 1977 to present¹**

Year	Retail price ²	Gross carcass value ³	Carcass by-product allowance ⁴	Net carcass value ⁵	Gross farm value ⁶	Farm by-product allowance ⁷	Net farm value ⁸	Farm-retail spread			
								Total	Carcass-retail	Farm-carcass	Farmers' share ⁹
Cents/lb								Percent			
1977	148.4	95.7	1.9	93.8	97.3	11.8	85.5	62.9	54.6	8.3	58
1978	181.9	121.6	2.3	119.3	126.1	15.0	111.1	70.8	62.6	8.2	61
1979	226.3	153.3	2.8	150.5	163.4	22.6	140.8	85.5	75.8	9.7	62
1980	237.6	157.7	2.3	155.4	161.9	16.9	145.0	92.6	82.2	10.4	61
1981	238.7	151.5	2.1	149.3	154.5	16.0	138.5	100.2	89.4	10.8	58
1978											
I	162.7	108.5	2.0	106.4	110.4	12.6	97.8	64.9	56.3	8.6	60
II	185.7	129.1	2.2	126.9	133.8	14.2	119.6	66.1	58.8	7.3	64
III	189.4	124.3	2.4	121.9	129.3	16.2	113.1	76.3	67.5	8.8	60
IV	189.7	124.5	2.4	122.1	131.0	17.2	113.8	75.9	67.6	8.3	60
1979											
I	215.4	148.8	2.7	146.1	158.4	21.1	137.3	78.1	69.3	8.8	64
II	235.5	160.8	3.1	157.7	175.3	27.0	148.3	87.2	77.8	9.4	63
III	226.6	149.3	2.7	146.6	158.7	22.3	136.4	90.1	79.9	10.2	59
IV	227.7	154.4	2.6	151.8	160.9	17.9	141.0	86.7	75.9	10.8	62
1980											
I	235.2	155.8	2.2	153.6	160.4	17.2	143.2	92.0	81.6	10.4	61
II	231.4	154.4	2.1	152.3	156.5	14.2	142.3	89.1	79.1	10.0	62
III	241.6	165.4	2.5	162.9	171.1	18.2	152.9	88.7	78.7	10.0	63
IV	242.3	155.1	2.3	152.8	159.5	18.1	141.4	100.9	89.5	11.4	58
1981											
I	237.5	147.5	2.0	145.4	150.1	16.0	134.1	103.4	92.1	11.3	56
II ¹⁰	234.7	155.5	2.1	153.4	160.8	16.6	144.2	90.5	81.3	9.2	61
III	243.1	158.3	2.3	156.0	160.8	16.3	144.5	98.6	87.1	11.5	59
IV	239.5	144.5	2.1	142.4	146.4	15.2	131.1	108.4	97.1	11.3	55
1982											
I	237.3	151.9	2.0	149.9	153.5	14.7	138.8	98.5	87.4	11.1	59
1981 ¹⁰											
Jan.	239.5	152.6	2.1	150.5	154.5	16.5	138.0	101.5	89.0	12.5	58
Feb.	237.5	146.6	2.0	144.6	149.2	15.3	133.9	103.6	92.9	10.7	56
Mar.	235.6	143.2	2.0	141.2	146.7	16.1	130.6	105.0	94.4	10.6	55
Apr.	230.9	148.7	2.0	146.7	155.0	17.1	137.9	93.0	84.2	8.8	60
May	234.3	157.3	2.2	155.1	162.3	16.7	145.6	88.6	79.1	9.5	62
June	238.9	160.6	2.2	158.4	165.2	16.0	149.2	89.7	80.5	9.2	63
July	242.9	162.2	2.3	159.9	164.2	16.3	147.9	95.0	83.0	12.0	62
Aug.	242.7	156.5	2.4	154.1	159.1	16.2	142.9	99.8	88.6	11.2	59
Sept.	243.8	156.2	2.3	153.9	159.1	16.3	142.8	101.0	89.9	11.1	59
Oct.	241.5	146.3	2.1	144.2	149.2	15.7	133.4	108.1	97.3	10.8	55
Nov.	239.0	144.3	2.2	142.1	146.6	15.2	131.4	107.6	96.9	10.7	55
Dec.	238.0	143.0	2.0	141.0	143.3	14.7	128.6	109.4	97.0	12.4	54
1982											
Jan.	236.9	147.1	2.0	145.1	146.3	14.5	131.8	105.1	91.8	13.3	56
Feb.	238.0	152.0	2.0	150.0	154.3	14.5	139.8	98.2	88.0	10.2	59
Mar.	237.0	156.7	2.1	154.6	160.0	15.1	144.9	92.1	82.4	9.7	61
Apr.	240.4	164.6	2.4	162.2	167.5	15.7	151.8	88.6	78.2	10.4	63
May	246.5	172.6	2.7	169.9	176.0	16.3	159.7	86.8	76.6	10.2	65

¹Revised series. ²Estimated weighted-average price of retail cuts from Choice Yield Grade 3 carcass. ³Value of carcass-quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.464 was used prior to 1970; it was increased gradually to 1.476 in 1976 and later years. ⁴Portion of gross carcass value attributed to fat and bone trim. ⁵Gross carcass value minus carcass byproduct allowance. ⁶Market value to producer for quantity of live-animal equivalent to 1 lb of retail cuts. The farm-product equivalent of 2.36 was used prior to 1970; it was increased gradually to 2.40 in 1976 and later years. ⁷Portion of gross farm value attributed to edible and inedible byproducts. ⁸Gross farm value minus farm byproduct allowance. ⁹Percent net farm value is of retail price. ¹⁰ERS data through May 1981, BLS series since June.

**Average retail price of meat per pound, United States, by months,
1979 to date¹**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
<i>Beef, Choice grade²</i>													
1979	204.9	215.3	225.9	232.8	240.2	233.6	232.2	220.9	226.6	224.3	226.2	232.6	226.3
1980	234.5	234.8	236.2	233.3	230.4	230.6	237.8	242.2	244.9	241.6	242.3	242.9	237.6
1981 ³	239.5	237.5	235.6	230.9	234.3	238.9	242.9	242.7	243.8	241.5	239.0	238.0	238.7
1982	236.9	238.0	237.0	240.4	246.5								
<i>Veal, retail cuts</i>													
1979	247.0	254.8	252.2	273.1	289.1	294.4	294.1	293.2	294.2	296.6	298.5	299.8	282.3
1980	301.6	303.8	305.9	310.2	310.0	311.4	309.8	311.4	309.8	309.1	314.1	316.4	309.5
1981 ⁴	314.6	314.7	314.1	316.4	314.9								
<i>Pork²</i>													
1980	135.3	133.2	133.3	127.8	123.6	124.4	136.2	145.7	150.7	153.8	156.3	153.8	139.5
1981 ³	151.5	148.4	146.2	142.7	144.9	146.6	154.9	158.1	159.5	160.4	158.2	157.4	152.4
1982	158.2	160.7	161.4	163.0	169.6								
<i>Lamb, Choice grade</i>													
1980	249.0	249.1	252.9	252.8	247.2	250.1	253.9	254.4	255.0	256.2	256.2	255.8	252.7
1981 ⁴	253.1	252.3	251.8	250.5	255.0								

¹Estimated weighted-average price of retail cuts. Compiled by ERS. ²Series revised. See special article in LMS-222, August 1978. ³ERS data through May, BLS series since June. ⁴Discontinued.

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Selected Marketings, slaughter and stock statistics for meat animals and meat

Item	1981					1982				
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	
1,000 head										
FEDERALLY INSPECTED: ¹										
Slaughter										
Cattle	2,846	2,939	2,668	2,829	2,771	2,591	2,819			
Steers	1,343	1,392	1,274	1,406	1,399	1,332	1,446			
Heifers	880	888	775	763	761	683	758			
Cows	553	596	563	604	561	525	553			
Bulls and stags	71	64	55	55	50	51	63			
Calves	228	236	217	254	228	210	263			
Sheep and lambs	546	558	476	522	509	490	570			
Hogs	7,320	7,872	7,309	7,923	6,875	6,340	7,691			
Percent										
Percentage sows	5.6	4.9	5.0	5.6	5.6	5.5	4.8			
lbs										
Average live weight per head:										
Cattle	1,064	1,076	1,083	1,087	1,086	1,079	1,080			
Calves	206	212	205	208	210	208	203			
Sheep and lambs	107	109	111	112	111	113	115			
Hogs	240	243	246	247	243	239	239			
Average dressed weight:										
Beef	633	638	640	640	640	634	636			
Veal	125	129	125	128	127	129	124			
Lamb and Mutton	53	54	55	56	56	57	58			
Pork	170	172	174	175	173	170	170			
Production:										
Beef	1,795	1,870	1,703	1,803	1,766	1,636	1,786			
Veal	28	30	27	32	29	26	32			
Lamb and mutton	29	30	26	29	28	28	33			
Pork	1,241	1,347	1,271	1,385	1,186	1,074	1,301			
1,000 head										
COMMERCIAL: ^{1, 2}										
Slaughter:										
Cattle	3,024	3,126	2,855	3,012	2,936	2,744	2,989			
Calves	261	271	247	284	251	231	288			
Sheep and Lambs	570	574	490	535	520	499	582			
Hogs	7,612	8,143	7,600	8,282	7,163	6,595	7,966			
Production:										
Beef	1,892	1,971	1,803	1,902	1,854	1,718	1,878			
Veal	38	40	35	40	35	32	39			
Lamb and mutton	30	31	27	30	29	28	33			
Pork	1,287	1,391	1,319	1,445	1,234	1,116	1,346			
Millions										
COLD STORAGE STOCKS ¹										
FIRST OF MONTH: ³										
Beef	246	235	245	234	258	249	223			
Veal	7	6	7	7	10	10	8			
Lamb and mutton	14	13	13	11	11	10	8			
Pork	225	207	238	255	264	247	246			
Total meat and meat products ⁴	539	509	547	552	583	554	524			
FOREIGN TRADE:										
Imports (carcass weight):										
Beef and veal	192	164	108	104	125	98	147	175	156	
Pork	35	47	44	42	37	35	54	42	54	
Lamb and mutton	6	2	(⁵)	(⁵)	(⁵)	1	2	2		
Exports (carcass weight):										
Beef and veal	18.9	22.8	20.3	18.2	15.0	19.1	22.2	20.6	25.2	
Pork	16.6	20.3	29.3	27.6	27.6	15.6	14.5	21.0	35.7	
Lamb and mutton	2.2	4.0	3.8	2.1	.1	.1	.1	.1	.1	
Number										
Live animal imports:										
Cattle	29,157	45,474	45,617	47,603	37,534	40,996	79,847	124,910	135,418	
Hog	8,176	10,171	8,792	9,076	12,599	26,517	36,372	18,413	14,088	
Sheep and lambs	536	4,361	18	436	14	14	4	14	100	
Live animal exports:										
Cattle	5,261	5,729	10,508	7,148	6,982	7,125	3,085	3,268	5,634	
Hogs	2,244	2,381	3,675	3,206	2,539	2,277	2,402	2,860	4,266	
Sheep and lambs	8,660	26,375	26,089	33,738	24,204	23,600	18,215	32,418	21,266	

¹Due to reduction in SRS reports, monthly data will no longer be available. ²Federally inspected and other commercial. ³Beginning Jan. 1977, excludes beef and pork stocks in cooler. ⁴Includes stocks of canned meats in cooler in addition to the meats listed. ⁵Less than 50,000 lbs.

Selected price statistics for meat animals and meat

Item	1981								1982				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<i>Dollars per 100 pounds</i>													
SLAUGHTER STEERS:													
Omaha:													
Choice, 900-1100 lb	66.86	68.26	67.86	66.37	65.37	61.45	59.81	59.24	60.75	63.54	65.80	69.11	72.10
Good, 900-1100 lb	61.76	62.43	62.95	61.60	60.93	58.36	57.21	55.53	55.89	58.02	60.48	64.59	67.02
California, Choice 900-1100 lb	68.38	69.12	67.40	67.09	68.40	65.88	65.19	63.95	63.06	64.31	66.90	69.75	73.56
Colorado, Choice 900-1100 lb	67.94	69.88	68.02	66.28	66.44	62.60	62.26	60.34	60.94	64.14	66.51	70.40	73.91
Texas, Choice 900-1100 lb	69.04	70.60	68.53	66.96	67.47	63.97	63.09	61.14	62.34	64.81	67.00	71.64	74.43
SLAUGHTER HEIFERS:													
Omaha:													
Choice, 900-1100 lb	65.72	66.32	65.82	63.57	62.74	58.44	58.20	57.83	59.17	61.98	64.24	67.50	71.21
Good, 700-900 lb	63.31	63.68	63.03	59.66	58.88	56.58	55.16	54.66	54.78	56.82	58.20	62.33	65.18
COWS:													
Omaha:													
Commercial	41.86	42.38	43.17	44.15	42.46	40.65	37.75	37.05	37.26	38.61	40.43	41.48	43.11
Utility	42.39	42.88	43.78	44.31	42.47	40.61	37.70	36.65	36.64	38.11	39.41	41.26	43.40
Cutter	42.40	42.80	43.48	42.44	40.47	38.29	35.28	34.03	34.41	36.11	36.97	39.85	40.72
Canner	40.31	41.01	41.36	40.80	38.58	35.76	32.32	30.82	31.24	32.60	32.52	35.40	36.65
VEALERS:													
Choice, So. St. Paul	84.25	82.88	76.00	77.25	77.30	71.75	68.88	67.50	69.00	67.50	71.50	78.00	82.88
FEEDER STEERS:¹													
Kansas City:													
Medium No. 1, 400-500 lb	72.50	72.02	69.04	70.95	71.52	66.56	67.05	63.16	63.18	64.52	68.32	70.09	73.58
Medium No. 1, 600-700 lb	65.79	65.12	63.22	65.75	66.16	64.07	64.02	60.06	60.08	63.28	65.78	66.08	67.78
Medium No. 2, 600-700 lb													
All weights and grades	63.10	63.51	61.51	64.15	64.58	62.52	61.77	58.96	59.22	62.37	63.96	64.72	66.07
Amarillo:													
Medium No. 1, 600-700 lb	61.70	63.20	61.62	64.16	65.11	62.50	64.17	60.50	60.78	63.78	64.74	64.07	64.50
Georgia auctions:													
Medium No. 1, 600-700 lb	56.75	58.38	55.30	56.62	57.00	56.38	56.38	55.00	55.12	57.38	61.90	59.25	60.12
Medium No. 2, 400-500 lb	58.25	59.50	55.30	57.25	56.00	54.88	57.50	55.33	55.75	58.00	59.80	59.38	59.38
FEEDER HEIFERS:													
Kansas City:													
Medium No. 1, 400-500 lb	60.99	60.87	58.08	61.22	59.75	55.06	55.58	52.62	53.62	54.51	56.18	58.42	60.38
Medium No. 1, 600-700 lb	59.58	59.00	57.88	59.60	59.68	56.05	56.28	52.64	54.32	55.92	57.85	58.76	60.15
SLAUGHTER HOGS:													
Barrows and gilts:													
Omaha:													
No. 1 & 2, 200-230 lb	43.28	50.06	51.77	51.60	49.62	45.80	42.87	41.24	46.86	50.34	49.86	52.50	58.50
All weights	41.76	48.35	50.12	50.50	49.68	45.61	41.75	39.75	45.38	49.20	49.09	51.61	57.84
Sioux City	41.96	48.78	51.01	51.14	49.89	46.15	42.10	40.17	45.77	49.70	49.50	52.16	58.35
7 markets ²	42.05	49.04	50.66	50.92	49.68	45.62	42.20	40.06	45.63	49.49	49.38	52.08	58.14
Sows:													
7 markets ²	37.42	43.12	43.74	44.78	46.47	43.24	38.63	33.77	39.70	44.84	46.28	50.71	52.91

See footnotes at end of table.

Continued—

Selected price statistics for meat animals and meat—Cont.

Item	1981							1982						
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	
Dollars per 100 pounds														
FEEDER PIGS:														
No. 1 & 2, So. Mo., 40-50 lb (per hd.)	36.10	37.88	32.88	38.55	40.23	34.20	31.88	29.11	31.70	39.96	52.04	55.94	57.84	
SLAUGHTER LAMBS:														
Lambs, Choice, San Angelo	65.38	67.76	64.38	61.62	52.30	54.25	48.50	—	51.50	53.50	60.70	66.54	67.12	
Lambs, Choice, So. St. Paul	64.20	65.20	58.47	53.15	49.40	50.52	45.37	45.36	48.05	52.68	60.52	60.85	65.30	
Ewes, Good, San Angelo	21.81	23.12	26.75	21.12	21.00	24.50	24.94	25.25	28.50	26.50	31.80	26.12	21.44	
Ewes, Good, So. St. Paul	11.85	11.65	16.16	16.00	14.26	11.90	11.65	13.06	14.70	15.00	15.00	15.10	12.60	
FEEDER LAMBS:														
Choice, San Angelo	60.69	69.92	56.62	54.56	51.40	51.62	49.33	50.94	50.44	53.25	57.65	64.88	63.50	
Choice, So. St. Paul	54.52	61.50	55.00	51.28	47.30	48.20	43.92	44.50	44.88	48.08	55.34	57.50	57.50	
FARM PRICES:														
Beef cattle	60.50	61.40	60.50	59.70	58.80	55.70	54.50	52.00	53.60	56.10	58.60	60.10	62.60	
Calves	66.00	66.30	62.00	62.30	61.40	59.00	59.40	57.70	57.10	58.90	61.90	62.30	65.10	
Hogs	40.90	47.40	49.30	49.20	48.60	45.00	41.50	39.00	43.40	48.40	48.60	50.70	56.20	
Sheep	19.50	20.30	23.00	20.40	20.30	19.70	19.10	19.20	25.10	21.30	27.20	22.20	21.90	
Lambs	63.10	65.00	59.50	56.20	50.40	50.60	47.40	47.50	50.40	53.30	60.30	61.50	63.10	
MEAT PRICES:														
Wholesale:														
Central U.S. markets														
Steer beef, Choice, 600-700 lb	103.32	106.52	107.23	103.90	102.96	96.02	94.56	93.70	97.42	101.24	103.82	109.50	115.14	
Heifer beef, Choice 500-600 lb	102.12	104.05	104.08	99.98	99.48	93.98	92.14	91.61	94.39	98.58	101.40	105.62	111.70	
Cow beef, Canner and Cutter	83.75	84.58	85.17	88.93	84.82	78.98	76.04	73.99	74.80	78.44	83.46	80.98	82.18	
Pork loins, 8-14 lb	94.16	102.31	105.70	104.88	104.56	98.77	90.92	86.56	105.74	102.17	95.45	105.81	115.68	
Pork bellies, 12-14 lb	45.07	55.26	54.74	59.54	60.07	55.43	56.68	51.35	62.22	67.84	66.67	74.38	80.82	
Hams, skinned, 14-17 lb	70.96	78.08	82.88	84.33	84.67	84.20	86.14	86.31	74.03	78.40	90.69	81.62	86.78	
East Coast:														
Lamb, Choice and Prime, 35-45 lb	138.04	143.61	138.12	128.94	116.12	118.00	113.77	111.80	114.43	120.19	132.33	137.50	147.21	
Lamb, Choice and Prime, 55-56 lb	137.50	142.75	137.30	127.75	115.90	116.08	109.00	106.42	109.41	116.75	129.60	134.50	144.12	
West Coast:														
Steer beef, Choice, 600-700 lb	109.46	110.27	110.14	108.18	110.81	105.50	103.64	103.13	103.00	103.82	113.10	113.01	116.83	
Retail:														
Beef, Choice	234.3	238.9	242.9	242.7	243.8	241.5	239.0	238.0	236.9	238.0	237.0	240.4	246.5	
Pork	144.9	146.6	154.9	158.1	159.5	160.4	158.2	157.4	158.2	160.7	161.4	163.0	169.6	
Price Indexes (BLS, 1967=100):														
Retail meats	252.3	254.2	259.6	262.0	263.4	262.5	259.6	258.7	257.8	260.2	261.2	263.6	269.7	
Beef and veal	270.3	271.1	274.5	275.9	277.1	274.9	271.5	270.5	269.4	271.5	271.7	274.8	281.1	
Pork	217.3	221.2	231.5	235.3	238.1	238.6	235.6	234.3	234.7	238.9	239.5	241.6	249.9	
Other meats	253.9	255.9	258.4	261.4	260.7	261.6	260.5	260.6	258.1	258.1	262.4	262.8	264.0	
Poultry	194.7	196.8	204.8	202.0	199.7	196.6	192.3	191.7	194.2	195.7	194.7	193.3	196.0	
LIVESTOCK-FEED RATIOS, OMAHA ³														
Beef steer-corn	20.6	21.4	21.5	23.8	26.0	25.2	25.0	25.0	24.6	25.9	26.5	26.5	27.2	
Hog-corn	12.9	15.2	15.9	18.1	19.8	18.7	17.5	16.8	18.4	20.1	19.8	19.8	21.8	

¹Reflects new feeder cattle grades. ²St. Louis, N.S.Y., Kansas City, Omaha, Sioux City, So. St. Joseph, So. St. Paul, and Indianapolis. ³Bushels of No. 2 yellow corn equivalent in value to 100 pounds live weight.

USE OF AN ADULT-EQUIVALENT SCALE IN MEAT DEMAND ANALYSIS

Barbara Claffey¹

Aggregate demand coefficients based on per capita consumption data are often criticized for not reflecting demographic changes. Critics suggest that using per capita data that reflect changes in consumption by different age and sex groups would result in significantly different aggregate demand coefficients. A new data set, an adult-equivalent scale (AES), corrects for demographic changes so that comparisons with the per capita consumption data for meat can be observed.

The concept of an AES is fairly simple and straightforward. In essence, it is an index expressing the consumption of a commodity by a person of a given age and sex as a proportion of that consumed by a "base" person. An AES series was computed for all meat products for the U.S. civilian population from 1965-1980. Intake data for all meat products, recorded during the Nationwide Food Consumption Survey (NFCS) in spring 1977, were used. A male, age 35 to 49, was selected as the base. All other individuals' consumption levels are expressed as a fraction of the base (table 1). Since the population has experienced certain structural changes (specifically, the post-World War II baby boom has reached adulthood, and the population growth has slowed considerably), consumption per "adult-equivalent unit" would differ significantly from consumption per person. Improvements in lifestyles and medical knowledge have also lengthened lifespans. The initial implication of these changes is an "older" population. The median age of the population has increased, from 28.3 years in 1965 to 30 years in 1980. Assuming adults consume more meat than children, this suggests that demand for meat products should expand as the median age increases.

To observe differences between per capita and per adult consumption levels, the civilian population is converted to adult equivalents. The weights for each age-sex category are multiplied by the number of persons in each category. This yields the number of adult equivalents based on meat intake levels. These adult equivalents are converted from population data from 1965 to 1980 and the projected population data from 1986 to 1995. For example, a male aged 10 to 14 years consumes about 72 percent as much meat as an adult male aged 35 to 49.² Thus, the civilian population was approximately 220.7 million persons in 1980, but 156.7 million on an AES basis (table 2).³

Once the two population measures are known, consumption levels (disappearance) are determined by dividing total supplies (retail weight) of meat and poultry by the civilian and adult-equivalent population. This provides a per capita and per adult intake (table 3).

Per capita consumption indicates meat use, assuming a homogenous population. Per adult-equivalent consumption indicates the level of meat use, after correcting for demographic change—as in our example, where the entire population is male and 35-49 years old. In absolute terms, per adult consumption measures are consider-

**Table 1—Index of meat consumption,
by age and sex¹**

Sex, age		Avg. daily meat intake ² (grams)	Index
Male, female	0-4	97.1	34.9
Male, female	5-9	142.4	51.2
Male	10-14	199.2	71.7
Female	10-14	164.0	59.0
Male	15-19	271.9	97.8
Female	15-19	169.8	61.1
Male	20-24	290.6	104.5
Female	20-24	174.6	62.8
Male	25-34	271.0	97.5
Female	25-34	173.0	62.2
Male	35-49	278.0	100.0
Female	35-49	173.0	62.2
Male	50-59	254.7	91.6
Female	50-59	174.0	62.6
Male	60-74	226.3	81.4
Female	60-74	158.9	57.2
Male	75 and over	191.0	68.7
Female	75 and over	130.0	46.8

¹Based on 1977 NFCS results. ²Includes intake of red meat and poultry.

**Table 2—U.S. civilian and derived adult
equivalent population**

Year	Population	AES population
<i>Numbers in thousands</i>		
1965	191,605	131,125.5
1966	193,420	132,664.1
1967	195,264	134,216.1
1968	197,113	135,818.5
1969	199,145	137,608.6
1970	201,722	139,817.6
1971	204,258	141,972.3
1972	206,461	143,981.4
1973	208,102	145,549.7
1974	209,683	147,104.2
1975	211,373	148,677.4
1976	213,011	150,223.2
1977	214,746	151,717.4
1978	216,600	153,140.4
1979	218,497	154,717.3
1980	220,700	156,697.0

ably greater than per capita estimates, because the adult-equivalent population is less than the civilian population (see table 3).

A ratio of the adult to civilian population is calculated in table 4. The ratio of the adult to civilian population does increase but hovers around .70, ranging from .685 in 1965 to .71 in 1980. The stability of this ratio suggests that the pattern of consumption whether measured by adult equivalents or civilian population are quite similar in this study.

Further support for the similarity between these measures is provided by comparing the percentage changes of both population series and consumption estimates (table 5). For example, from 1970 to 1971, the total civilian population increased 1.3 percent; measured as adult equivalents, the population increased 1.5 percent over the same time. Per capita consumption during this period

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²Of course, these weights would vary by commodity.

³Numbers unrevised for Census undercount.

Table 3—Per capita and per adult consumption of meat products

Year	Per capita consumption	Per adult consumption
<i>Pounds per year</i>		
1965	174.4	254.8
1966	180.9	263.7
1967	189.0	275.0
1968	192.8	279.8
1969	194.2	281.0
1970	199.6	288.0
1971	204.9	294.8
1972	203.7	292.1
1973	190.7	272.6
1974	200.8	286.2
1975	192.5	273.7
1976	205.8	291.8
1977	206.5	292.3
1978	202.6	286.6
1979	205.0	289.5
1980	212.4	299.1

Table 4—Adult equivalents as percentage of civilian population

Year	Adult equivalents as percentage of civilian population
1965	68.5
1970	69.3
1975	70.3
1980	71.0
1986	70.9
1990	70.7
1995	70.8

increased 2.6 percent, while per adult consumption rose 2.4 percent.

Translating consumption data to an adult-equivalent unit is warranted in terms of the analytical results gained in cases of rapid demographic change or in cross-

Table 5—Percentage change in population and consumption

Year	Civilian population	AES population	Per-capita consumption	Adult consumption
<i>Percent change from previous year</i>				
1966	.95	1.17	3.7	3.5
1967	.95	1.17	4.5	4.3
1968	.95	1.19	2.0	1.7
1969	1.03	1.32	0.7	0.4
1970	1.29	1.60	2.9	2.5
1971	1.26	1.54	2.6	2.4
1972	1.08	1.42	-0.6	-0.9
1973	.80	1.09	-6.8	-7.2
1974	.76	1.07	5.3	5.0
1975	.81	1.07	-4.3	-4.6
1976	.78	1.04	6.9	6.6
1977	.81	1.00	0.3	0.2
1978	.87	.94	-1.9	-2.0
1979	.88	1.03	1.2	1.0
1980 ¹	1.01	1.01	3.6	3.3
1981-86 ²	1.53	1.02		
1987	.91	.83		
1988	.89	.81		
1989	.87	.80		
1990	.84	.80		
1991	.81	.80		
1992	.78	.79		
1993	.74	.76		
1994	.71	.75		
1995	.67	.73		

¹Numbers unrevised for Census undercount. Revised numbers not available by age and sex breakdown. ²Annual average for the six year period.

sectional comparisons between regions or countries with differing demographic properties. The value of such a system may well be found in interregional studies of demand for meat or in regional studies in which migration is changing the population's composition.

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